WEBVTT

00:00:00.000 --> 00:00:02.460 Support for Yale Cancer Answers

NOTE Confidence: 0.8524915

00:00:02.460 --> 00:00:04.920 comes from AstraZeneca, dedicated

NOTE Confidence: 0.8524915

00:00:05.003 --> 00:00:07.353 to advancing options and providing

NOTE Confidence: 0.8524915

00:00:07.353 --> 00:00:10.310 hope for people living with cancer.

NOTE Confidence: 0.8524915

00:00:10.310 --> 00:00:13.958 More information at astrazeneca-us.com.

NOTE Confidence: 0.8524915

00:00:13.960 --> 00:00:15.856 Welcome to Yale Cancer Answers with

NOTE Confidence: 0.8524915

00:00:15.856 --> 00:00:17.945 your host doctor Anees Chagpar.

NOTE Confidence: 0.8524915

00:00:17.945 --> 00:00:19.845 Yale Cancer Answers features the

NOTE Confidence: 0.8524915

00:00:19.845 --> 00:00:22.128 latest information on cancer care by

NOTE Confidence: 0.8524915

00:00:22.128 --> 00:00:23.576 welcoming oncologists and specialists

NOTE Confidence: 0.8524915

00:00:23.576 --> 00:00:26.098 who are on the forefront of the

NOTE Confidence: 0.8524915

00:00:26.098 --> 00:00:28.240 battle to fight cancer. This week,

NOTE Confidence: 0.8524915

00:00:28.240 --> 00:00:30.070 it's a conversation about the

NOTE Confidence: 0.8524915

00:00:30.070 --> 00:00:31.534 surgical management of thoracic

NOTE Confidence: 0.8524915

00:00:31.534 --> 00:00:33.237 malignancies with Doctor Andrew Dhanasopon

NOTE Confidence: 0.8524915

00:00:33.240 --> 00:00:35.436 Doctor Dhanasopon is an

NOTE Confidence: 0.8524915

00:00:35.436 --> 00:00:36.900 assistant professor of thoracic

NOTE Confidence: 0.8524915

00:00:36.966 --> 00:00:39.304 surgery at the Yale School of Medicine,

NOTE Confidence: 0.8524915

00:00:39.310 --> 00:00:42.118 where Doctor Chagpar is a

NOTE Confidence: 0.8524915

00:00:42.118 --> 00:00:43.990 professor of surgical oncology.

NOTE Confidence: 0.8402907

00:00:44.420 --> 00:00:46.605 Andrew, maybe we can start

NOTE Confidence: 0.8402907

00:00:46.605 --> 00:00:49.620 off by you telling us a little

NOTE Confidence: 0.8402907

00:00:49.620 --> 00:00:53.517 bit more about what it is that you do.

NOTE Confidence: 0.8402907

00:00:53.520 --> 00:00:56.190 Thoracic surgeons operate on the chest

NOTE Confidence: 0.8402907

00:00:56.190 --> 00:00:58.709 most commonly cancers within the chest,

NOTE Confidence: 0.8402907

00:00:58.710 --> 00:01:01.014 but we take care of patients

NOTE Confidence: 0.8402907

00:01:01.014 --> 00:01:03.142 with both malignant and benign

NOTE Confidence: 0.8402907

00:01:03.142 --> 00:01:05.210 conditions within the chest.

NOTE Confidence: 0.8402907

00:01:05.210 --> 00:01:07.200 The majority of our patients

NOTE Confidence: 0.8402907

00:01:07.200 --> 00:01:09.970 tend to be lung cancer patients,

NOTE Confidence: 0.8402907

00:01:09.970 --> 00:01:13.036 and so that tends to be the

NOTE Confidence: 0.8402907

00:01:13.036 --> 00:01:14.980 majority of our practice.

NOTE Confidence: 0.8220748

00:01:14.980 --> 00:01:18.742 Lung cancer seems to be

NOTE Confidence: 0.8220748

00:01:18.742 --> 00:01:21.890 pretty prevalent. Is that still the case?

NOTE Confidence: 0.8220748

00:01:21.890 --> 00:01:26.132 Yes, this is still the

NOTE Confidence: 0.8220748

00:01:26.132 --> 00:01:30.240 case due to smoking history.

NOTE Confidence: 0.8220748

00:01:30.240 --> 00:01:33.416 And it is the number one cause of

NOTE Confidence: 0.8220748

00:01:33.416 --> 00:01:36.960 death by cancer in the United States.

NOTE Confidence: 0.8220748

00:01:36.960 --> 00:01:40.096 And it is the second most common

NOTE Confidence: 0.8220748

00:01:40.100 --> 00:01:42.782 highest incidence of cancer for both

NOTE Confidence: 0.8220748

00:01:42.782 --> 00:01:45.918 men and women.

NOTE Confidence: 0.8575296

00:01:45.920 --> 00:01:47.712 And when you think about that,

NOTE Confidence: 0.8575296

00:01:47.712 --> 00:01:50.400 often on this show,

NOTE Confidence: 0.8575296

00:01:50.400 --> 00:01:53.634 we talk about all kinds of different

NOTE Confidence: 0.8575296

00:01:53.634 --> 00:01:56.670 modalities that people use to treat cancer,

NOTE Confidence: 0.8575296

00:01:56.670 --> 00:01:59.418 whether it's surgery or whether it's

NOTE Confidence: 0.8575296

00:01:59.418 --> 00:02:02.030 chemotherapy or whether it's radiation.

NOTE Confidence: 0.8575296

00:02:02.030 --> 00:02:04.595 How many patients actually, or

NOTE Confidence: 0.8575296

00:02:04.595 --> 00:02:07.160 what proportion of lung cancer

NOTE Confidence: 0.8575296

00:02:07.252 --> 00:02:09.987 patients actually are treated with

NOTE Confidence: 0.8575296

00:02:09.987 --> 00:02:12.722 surgery? Is that the majority,

NOTE Confidence: 0.87110996

00:02:12.730 --> 00:02:15.999 or is that a pretty low number

NOTE Confidence: 0.87110996

00:02:15.999 --> 00:02:19.304 compared to the total number of

NOTE Confidence: 0.87110996

00:02:19.304 --> 00:02:22.892 patients who are diagnosed each year?

NOTE Confidence: 0.87110996

00:02:22.900 --> 00:02:25.990 The number of patients who are

NOTE Confidence: 0.87110996

00:02:25.990 --> 00:02:29.257 eligible for surgery is not the

NOTE Confidence: 0.87110996

00:02:29.257 --> 00:02:31.796 majority of patients, however, as

NOTE Confidence: 0.87110996

00:02:31.796 --> 00:02:34.862 we detect more and more lung cancer

NOTE Confidence: 0.87110996

00:02:34.862 --> 00:02:37.108 through lung cancer screening,

NOTE Confidence: 0.87110996

00:02:37.110 --> 00:02:39.415 more patients are identified earlier

NOTE Confidence: 0.87110996

00:02:39.415 --> 00:02:42.618 in the disease process and thus are

NOTE Confidence: 0.87110996

00:02:42.618 --> 00:02:45.084 eligible for surgery as a treatment.

NOTE Confidence: 0.87110996

00:02:45.090 --> 00:02:48.630 As a surgeon, I guess

NOTE Confidence: 0.8609519

00:02:48.630 --> 00:02:51.288 I am a little bit biased,

NOTE Confidence: 0.8609519

00:02:51.290 --> 00:02:54.314 but I often think that when

NOTE Confidence: 0.8609519

00:02:54.314 --> 00:02:57.048 patients are eligible for surgery,

NOTE Confidence: 0.8609519

00:02:57.050 --> 00:02:59.594 it's often a good thing because

NOTE Confidence: 0.8609519

00:02:59.594 --> 00:03:01.850 we're often treating people for

NOTE Confidence: 0.8609519

00:03:01.850 --> 00:03:04.139 curative intent. Is that right?

NOTE Confidence: 0.86993307

00:03:04.770 --> 00:03:06.925 Yes, and that's the same

NOTE Confidence: 0.86993307

00:03:06.925 --> 00:03:09.080 for lung cancer as well.

NOTE Confidence: 0.86993307

00:03:09.080 --> 00:03:11.924 Surgery for lung cancer typically is

NOTE Confidence: 0.86993307

00:03:11.924 --> 00:03:15.024 most helpful for patients who are in

NOTE Confidence: 0.86993307

00:03:15.024 --> 00:03:17.268 their early stage of lung cancer.

NOTE Confidence: 0.808463

00:03:18.390 --> 00:03:22.142 And so historically talk a little bit

NOTE Confidence: 0.808463

00:03:22.142 --> 00:03:25.708 about how lung cancer was managed

NOTE Confidence: 0.808463

00:03:25.710 --> 00:03:26.786 surgically.

NOTE Confidence: 0.808463

00:03:26.786 --> 00:03:30.014 Sure, lung cancer had been managed

NOTE Confidence: 0.808463

00:03:30.014 --> 00:03:33.029 with what's called a thoracotomy.

NOTE Confidence: 0.808463

00:03:33.030 --> 00:03:36.426 And a thoracotomy is a large

NOTE Confidence: 0.808463

00:03:36.426 --> 00:03:40.348 incision on the side of the chest,

NOTE Confidence: 0.808463

00:03:40.350 --> 00:03:44.662 usually about 6 inches or so long and

NOTE Confidence: 0.808463

00:03:44.662 --> 00:03:48.870 through that skin incision the access is

NOTE Confidence: 0.808463

00:03:48.870 --> 00:03:51.300 in between the ribs and those

NOTE Confidence: 0.808463

00:03:51.300 --> 00:03:53.816 are spread open in order to

NOTE Confidence: 0.808463

00:03:53.816 --> 00:03:56.246 access the lung and the lung

NOTE Confidence: 0.808463

00:03:56.246 --> 00:03:58.830 cancer to remove the tumor.

NOTE Confidence: 0.8733703

00:03:59.850 --> 00:04:02.102 And so tell us more. I mean,

NOTE Confidence: 0.8733703

00:04:02.102 --> 00:04:04.670 it sounds like that's a pretty big operation.

NOTE Confidence: 0.8733703

00:04:04.670 --> 00:04:06.590 You're in the hospital

NOTE Confidence: 0.8733703

00:04:06.590 --> 00:04:08.456 and somebody is making this large cut

NOTE Confidence: 0.8733703

00:04:08.456 --> 00:04:10.412 in your chest and spreading ribs

NOTE Confidence: 0.8733703

00:04:10.412 --> 00:04:12.687 and taking out part of your lung.

NOTE Confidence: 0.8733703

00:04:12.690 --> 00:04:14.510 What does that feel like or look

NOTE Confidence: 0.8733703

00:04:14.510 --> 00:04:16.539 like from a patient perspective?

NOTE Confidence: 0.8733703

00:04:16.540 --> 00:04:18.466 How long are you in hospital?

NOTE Confidence: 0.8733703

00:04:18.470 --> 00:04:20.075 Does that mean that you're

NOTE Confidence: 0.8733703

00:04:20.075 --> 00:04:21.359 on a breathing tube?

NOTE Confidence: 0.8733703

00:04:21.360 --> 00:04:23.600 Does that mean that you're in ICU?

NOTE Confidence: 0.8733703

00:04:23.600 --> 00:04:24.840 Give us more of a sense of

00:04:27.424 --> 00:04:29.380 what that looks like.

NOTE Confidence: 0.86349416

00:04:29.780 --> 00:04:35.156 Sure, so overtime up till modern day when

NOTE Confidence: 0.86349416

00:04:35.156 --> 00:04:38.055 patients require thoracotomy incision

NOTE Confidence: 0.86349416

00:04:38.055 --> 00:04:43.081 for their lung cancer the hospital stay

NOTE Confidence: 0.86349416

00:04:43.081 --> 00:04:47.979 is usually between three to five days.

NOTE Confidence: 0.86349416

00:04:47.980 --> 00:04:50.822 And patients are usually in a step

NOTE Confidence: 0.86349416

00:04:50.822 --> 00:04:53.678 down unit for monitoring their vital

NOTE Confidence: 0.86349416

00:04:53.678 --> 00:04:57.290 signs and the majority of the hospital

NOTE Confidence: 0.86349416

00:04:57.381 --> 00:05:00.517 stay is making sure their pain is

NOTE Confidence: 0.86349416

00:05:00.517 --> 00:05:03.259 well controlled so that they can

NOTE Confidence: 0.86349416

00:05:03.259 --> 00:05:06.037 deep breathe well and cough well

NOTE Confidence: 0.86349416

00:05:06.040 --> 00:05:09.736 and recover after such a big operation.

NOTE Confidence: 0.8172167

00:05:10.720 --> 00:05:13.814 But I understand that now,

NOTE Confidence: 0.8172167

00:05:13.820 --> 00:05:17.586 just like many surgeries we think

NOTE Confidence: 0.8172167

00:05:17.586 --> 00:05:19.956 about gallbladder surgery that used

NOTE Confidence: 0.8172167

00:05:19.956 --> 00:05:23.120 to be done with a big cut as well.

NOTE Confidence: 0.8172167

00:05:23.120 --> 00:05:26.228 Where now it can be done with

NOTE Confidence: 0.8172167

00:05:26.230 --> 00:05:30.208 3 little holes and some cameras.

NOTE Confidence: 0.8172167

00:05:30.210 --> 00:05:32.694 What many people in the lay

NOTE Confidence: 0.8172167

00:05:32.694 --> 00:05:34.350 public call little telescopes

NOTE Confidence: 0.8172167

00:05:34.420 --> 00:05:36.755 where the gallbladder can be

NOTE Confidence: 0.8172167

00:05:36.755 --> 00:05:38.623 removed through tiny incisions,

NOTE Confidence: 0.8172167

00:05:38.630 --> 00:05:40.658 has lung cancer surgery

NOTE Confidence: 0.8172167

00:05:40.658 --> 00:05:42.686 progressed to that point?

NOTE Confidence: 0.862617

00:05:42.690 --> 00:05:45.030 Yes, absolutely,

NOTE Confidence: 0.862617

00:05:45.030 --> 00:05:47.955 so that's minimally invasive lung

NOTE Confidence: 0.862617

00:05:47.955 --> 00:05:50.906 surgery starting in about the 90s,

NOTE Confidence: 0.862617

00:05:50.910 --> 00:05:54.746 there was the progress in terms of

NOTE Confidence: 0.862617

00:05:54.746 --> 00:05:56.390 minimally invasive instrumentation.

NOTE Confidence: 0.862617

00:05:56.390 --> 00:05:59.672 Just as you had mentioned

NOTE Confidence: 0.862617

00:05:59.672 --> 00:06:01.313 for Gallbladder surgery,

NOTE Confidence: 0.862617

00:06:01.320 --> 00:06:02.964 these laparoscopic instruments

NOTE Confidence: 0.862617

00:06:02.964 --> 00:06:05.704 were modified for the chest,

NOTE Confidence: 0.862617

00:06:05.710 --> 00:06:09.028 and so what that looks like

NOTE Confidence: 0.862617

00:06:09.028 --> 00:06:13.160 today is usually a camera

NOTE Confidence: 0.862617

00:06:13.160 --> 00:06:16.583 and it's usually about a 5 millimeter

NOTE Confidence: 0.862617

00:06:16.583 --> 00:06:20.598 or less than half an inch in diameter

NOTE Confidence: 0.862617

00:06:20.600 --> 00:06:23.815 that gets projected onto

NOTE Confidence: 0.862617

00:06:23.815 --> 00:06:27.990 a typical HD screen in the OR

NOTE Confidence: 0.862617

00:06:27.990 --> 00:06:30.710 through one incision and there

NOTE Confidence: 0.862617

00:06:30.710 --> 00:06:33.430 are three other small incisions,

NOTE Confidence: 0.862617

00:06:33.430 --> 00:06:35.734 again, usually quite small,

NOTE Confidence: 0.862617

00:06:35.734 --> 00:06:39.190 about a centimeter and through these

NOTE Confidence: 0.862617

00:06:39.280 --> 00:06:42.745 total of four incisions we use that

NOTE Confidence: 0.862617

00:06:42.745 --> 00:06:45.400 technique to remove lung cancer,

NOTE Confidence: 0.862617

00:06:45.400 --> 00:06:50.468 where previously we had done a thoracotomy.

00:06:50.830 --> 00:06:52.894 So it sounds like that would

NOTE Confidence: 0.90155673

00:06:52.894 --> 00:06:54.270 potentially be much easier

NOTE Confidence: 0.90155673

00:06:54.338 --> 00:06:56.125 on patients, much less pain.

NOTE Confidence: 0.90155673

00:06:56.125 --> 00:06:58.990 So what does that picture look like?

NOTE Confidence: 0.90155673

00:06:58.990 --> 00:07:02.938 I mean, do patients go home sooner?

00:07:04.272 --> 00:07:07.380 It doesn't sound like you'd need to

NOTE Confidence: 0.90155673

00:07:07.471 --> 00:07:10.656 spread ribs and those kinds of things,

NOTE Confidence: 0.90155673

00:07:10.660 --> 00:07:13.838 so pain is a contrasting picture to

NOTE Confidence: 0.83112234

00:07:13.840 --> 00:07:16.105 what that looks like as

NOTE Confidence: 0.83112234

00:07:16.105 --> 00:07:17.917 opposed to a thoracotomy.

NOTE Confidence: 0.83112234

00:07:17.920 --> 00:07:20.165 Sure, so when patients undergo

NOTE Confidence: 0.83112234

00:07:20.165 --> 00:07:22.930 this type of surgery called VATS

NOTE Confidence: 0.83112234

00:07:22.930 --> 00:07:25.100 or video assisted thoracoscopic surgery

00:07:27.460 --> 00:07:30.178 because of the smaller incisions,

NOTE Confidence: 0.83112234

00:07:30.180 --> 00:07:33.010 patients do have less pain.

NOTE Confidence: 0.83112234

00:07:33.010 --> 00:07:35.854 They do recover in the hospital

NOTE Confidence: 0.83112234

00:07:35.854 --> 00:07:39.070 and at home much more easily,

NOTE Confidence: 0.83112234

00:07:39.070 --> 00:07:42.374 and their quality of life and a

NOTE Confidence: 0.83112234

00:07:42.374 --> 00:07:45.784 return to work is sooner as well

NOTE Confidence: 0.83112234

00:07:45.784 --> 00:07:48.616 and from a variety of studies

NOTE Confidence: 0.83112234

00:07:48.722 --> 00:07:51.697 that have been done overtime

NOTE Confidence: 0.83112234

00:07:51.700 --> 00:07:55.244 this has shown to be the case compared

NOTE Confidence: 0.83112234

00:07:55.244 --> 00:07:58.259 to open thoracotomy cases and

NOTE Confidence: 0.81430984

00:07:58.260 --> 00:08:00.428 so, whereas thoracotomy patients

NOTE Confidence: 0.81430984

00:08:00.428 --> 00:08:03.680 spend about three to four days

NOTE Confidence: 0.81430984

00:08:03.680 --> 00:08:06.878 in hospital, in a step down,

NOTE Confidence: 0.81430984

00:08:06.880 --> 00:08:10.078 what happens to patients who are
NOTE Confidence: 0.8619048
00:08:10.080 --> 00:08:12.855 treated with vats usually does
NOTE Confidence: 0.8619048
00:08:12.855 --> 00:08:16.225 result in a reduction of the
NOTE Confidence: 0.8619048
00:08:16.225 --> 00:08:19.669 hospital stay from one to two days,
NOTE Confidence: 0.8619048
00:08:19.670 --> 00:08:22.340 depending on various other factors.
NOTE Confidence: 0.8619048
00:08:22.340 --> 00:08:25.430 But the reduction in the hospital
NOTE Confidence: 0.8619048
00:08:25.430 --> 00:08:28.730 stay is usually from reduction in pain.
00:08:33.510 --> 00:08:36.732 If we take a step back and we think
NOTE Confidence: 0.8619048
00:08:36.732 --> 00:08:39.898 about it from the health care system,
NOTE Confidence: 0.8619048
00:08:39.900 --> 00:08:43.155 Is 1 procedure cheaper than the other?
NOTE Confidence: 0.8619048
00:08:43.160 --> 00:08:46.624 I mean, I can see that you know
NOTE Confidence: 0.8619048
00:08:46.624 --> 00:08:48.555 thoracotomies likely have increased
NOTE Confidence: 0.8619048
00:08:48.555 --> 00:08:51.985 costs due to increased length of stay,
NOTE Confidence: 0.8619048
00:08:51.990 --> 00:08:55.441 but on the other hand there's
NOTE Confidence: 0.8619048
00:08:55.441 --> 00:08:57.430 capital equipment and technology
NOTE Confidence: 0.8619048
00:08:57.430 --> 00:09:00.356 that adds up to cost as well.
NOTE Confidence: 0.8619048

00:09:00.360 --> 00:09:02.220 Have people looked at

NOTE Confidence: 0.8619048

00:09:02.220 --> 00:09:04.080 differences between vats and

NOTE Confidence: 0.85912424

00:09:04.080 --> 00:09:06.410 thoracotomy in terms of cost?

NOTE Confidence: 0.85912424

00:09:06.410 --> 00:09:09.130 Yes, there have been several

NOTE Confidence: 0.85912424

00:09:09.130 --> 00:09:11.306 studies and the general

NOTE Confidence: 0.85912424

00:09:11.310 --> 00:09:15.489 conclusion from these is that because of

NOTE Confidence: 0.85912424

00:09:15.489 --> 00:09:19.210 reduced hospital stay,

NOTE Confidence: 0.85912424

00:09:19.210 --> 00:09:22.562 the minimally invasive approach,

NOTE Confidence: 0.85912424

00:09:22.562 --> 00:09:25.914 is less costly.

NOTE Confidence: 0.85912424

00:09:25.920 --> 00:09:28.220 But as you were saying,

NOTE Confidence: 0.85912424

00:09:28.220 --> 00:09:30.788 the hospital of course has to

NOTE Confidence: 0.85912424

00:09:30.788 --> 00:09:33.260 invest in the capital upfront,

NOTE Confidence: 0.85912424

00:09:33.260 --> 00:09:36.525 and this is also similar

NOTE Confidence: 0.85912424

00:09:36.525 --> 00:09:39.137 to another minimally invasive

NOTE Confidence: 0.85912424

00:09:39.140 --> 00:09:41.236 instrument, the robotic approach.

NOTE Confidence: 0.85912424

00:09:41.236 --> 00:09:44.285 Again, there is investment upfront on

NOTE Confidence: 0.85912424

00:09:44.285 --> 00:09:47.510 the hospital and the health system,

NOTE Confidence: 0.85912424

00:09:47.510 --> 00:09:51.686 but overtime there is reduced cost.

NOTE Confidence: 0.8590415

00:09:51.690 --> 00:09:54.130 For patients, when patients

NOTE Confidence: 0.8590415

00:09:54.130 --> 00:09:57.790 are looking at paying out of

NOTE Confidence: 0.8590415

00:09:57.903 --> 00:10:01.007 pocket for these procedures,

NOTE Confidence: 0.8590415

00:10:01.010 --> 00:10:03.803 or if they have a particular percentage

NOTE Confidence: 0.8590415

00:10:03.803 --> 00:10:06.706 that they have to pay in terms of

NOTE Confidence: 0.8590415

00:10:06.706 --> 00:10:08.930 copays and those kinds of things,

NOTE Confidence: 0.8590415

00:10:08.930 --> 00:10:11.138 is there a difference in terms

NOTE Confidence: 0.8590415

00:10:11.138 --> 00:10:13.070 of patient cost as well?

NOTE Confidence: 0.85848075

00:10:14.460 --> 00:10:17.961 I actually do not have a good idea on

NOTE Confidence: 0.85848075

00:10:17.961 --> 00:10:21.588 the cost from the patient standpoint.

NOTE Confidence: 0.85848075

00:10:21.590 --> 00:10:25.139 I do believe that as the healthcare

NOTE Confidence: 0.85848075

00:10:25.139 --> 00:10:28.343 system has savings on this that it

NOTE Confidence: 0.85848075

00:10:28.343 --> 00:10:31.560 would get passed on to the patient,

NOTE Confidence: 0.85848075

00:10:31.560 --> 00:10:33.940 but I I don't know.

NOTE Confidence: 0.85848075

00:10:33.940 --> 00:10:36.310 Yeah one would

NOTE Confidence: 0.85848075

00:10:36.310 --> 00:10:38.950 certainly imagine so and

NOTE Confidence: 0.85848075

00:10:38.950 --> 00:10:41.334 VATS procedures now have become

NOTE Confidence: 0.85848075

00:10:41.334 --> 00:10:43.930 fairly widely accepted, right?

NOTE Confidence: 0.85848075

00:10:43.930 --> 00:10:46.355 So most insurances should cover

NOTE Confidence: 0.85848075

00:10:46.355 --> 00:10:48.417 VATS procedures just as

NOTE Confidence: 0.85848075

00:10:48.417 --> 00:10:50.460 they would thoracotomies?

NOTE Confidence: 0.80300575

00:10:50.460 --> 00:10:52.272 Yes, absolutely.

NOTE Confidence: 0.80300575

00:10:52.272 --> 00:10:54.537 All insurance companies do cover

NOTE Confidence: 0.80300575

00:10:54.540 --> 00:10:56.348 VATS the minimally invasive

NOTE Confidence: 0.80300575

00:10:56.348 --> 00:10:58.156 approach compared to thoracotomy.

NOTE Confidence: 0.80300575

00:10:58.160 --> 00:11:00.878 So are there any reasons why

NOTE Confidence: 0.80300575

00:11:00.880 --> 00:11:04.208 a particular patient may not opt for a

NOTE Confidence: 0.80300575

00:11:04.208 --> 00:11:06.768 vats procedure versus a thoracotomy,

NOTE Confidence: 0.80300575

00:11:06.770 --> 00:11:09.416 are there patients that you would

NOTE Confidence: 0.80300575

00:11:09.416 --> 00:11:12.205 kind of lean more towards doing

NOTE Confidence: 0.80300575

00:11:12.205 --> 00:11:15.430 things as we would say old school.

NOTE Confidence: 0.799758260000001

00:11:16.310 --> 00:11:20.489 As you can imagine for the

NOTE Confidence: 0.799758260000001

00:11:20.489 --> 00:11:22.971 minimally invasive approach that

NOTE Confidence: 0.799758260000001

00:11:22.971 --> 00:11:25.319 requires instrumentation that is

NOTE Confidence: 0.799758260000001

00:11:25.319 --> 00:11:28.955 small in order to fit through

NOTE Confidence: 0.799758260000001

00:11:28.955 --> 00:11:32.537 these small incisions that we use,

NOTE Confidence: 0.799758260000001

00:11:32.540 --> 00:11:37.730 and so vats is used for

NOTE Confidence: 0.799758260000001

00:11:37.730 --> 00:11:39.506 relatively straightforward lung

NOTE Confidence: 0.799758260000001

00:11:39.506 --> 00:11:41.874 cancer operations. For operations

NOTE Confidence: 0.799758260000001

00:11:41.874 --> 00:11:44.640 that are more complicated,

NOTE Confidence: 0.799758260000001

00:11:44.640 --> 00:11:48.854 for example, larger tumor or if the

NOTE Confidence: 0.799758260000001

00:11:48.854 --> 00:11:51.443 patient has received chemotherapy

NOTE Confidence: 0.799758260000001

00:11:51.443 --> 00:11:56.112 and or radiation where there is more

NOTE Confidence: 0.799758260000001

00:11:56.112 --> 00:11:59.335 scarring due to those treatments

NOTE Confidence: 0.799758260000001

00:11:59.335 --> 00:12:02.887 that does make it more difficult

NOTE Confidence: 0.799758260000001

00:12:02.887 --> 00:12:06.040 to use the vats instruments.

NOTE Confidence: 0.799758260000001

00:12:07.960 --> 00:12:08.435 It's not totally unreasonable,

NOTE Confidence: 0.799758260000001

00:12:08.435 --> 00:12:11.760 but it is certainly easier on the

NOTE Confidence: 0.799758260000001

00:12:11.760 --> 00:12:14.943 surgeon to do the operation through

NOTE Confidence: 0.799758260000001

00:12:14.943 --> 00:12:17.628 a thoracotomy for those scenarios.

NOTE Confidence: 0.799758260000001

00:12:17.630 --> 00:12:19.160 And does it

NOTE Confidence: 0.8579366

00:12:19.160 --> 00:12:21.836 take special kind of training to

NOTE Confidence: 0.8579366

00:12:21.836 --> 00:12:25.270 be able to do vats procedures,

NOTE Confidence: 0.8579366

00:12:25.270 --> 00:12:27.815 or are most lung cancer

NOTE Confidence: 0.8579366

00:12:27.815 --> 00:12:30.360 surgeons pretty adept at both?

NOTE Confidence: 0.8615829

00:12:31.730 --> 00:12:33.610 In today's thoracic surgery

NOTE Confidence: 0.8615829

00:12:33.610 --> 00:12:35.020 practices, almost all,

NOTE Confidence: 0.8615829

00:12:35.020 --> 00:12:37.840 at least in the United States,

NOTE Confidence: 0.8615829

00:12:37.840 --> 00:12:39.720 almost all thoracic surgeons

NOTE Confidence: 0.8615829

00:12:39.720 --> 00:12:42.070 have been trained in vats.

NOTE Confidence: 0.8615829

00:12:42.070 --> 00:12:44.420 In addition to the traditional

NOTE Confidence: 0.8615829

00:12:44.420 --> 00:12:45.360 thoracotomy approach,

NOTE Confidence: 0.8615829

00:12:45.360 --> 00:12:47.240 and so most hospitals

NOTE Confidence: 0.8615829

00:12:47.240 --> 00:12:49.120 then have this technology

NOTE Confidence: 0.8615829

00:12:49.120 --> 00:12:51.470 that patients would be able

NOTE Confidence: 0.8615829

00:12:51.470 --> 00:12:53.350 to avail themselves of.

NOTE Confidence: 0.8615829

00:12:53.350 --> 00:12:57.110 It's not like you have to go to,

NOTE Confidence: 0.8615829

00:12:57.110 --> 00:12:58.990 you know some place special

NOTE Confidence: 0.8615829

00:12:58.990 --> 00:13:01.810 to get that. Is that right?

NOTE Confidence: 0.84481424

00:13:02.290 --> 00:13:05.086 Exactly most hospitals would have this.

NOTE Confidence: 0.84481424

00:13:05.090 --> 00:13:06.954 The instrumentation for minimally

NOTE Confidence: 0.84481424

00:13:06.954 --> 00:13:10.230 invasive vats, yes.

NOTE Confidence: 0.84481424

00:13:10.230 --> 00:13:13.032 We are going to take a very short break

NOTE Confidence: 0.84481424

00:13:13.032 --> 00:13:14.900 for a medical minute.

NOTE Confidence: 0.84481424

00:13:14.900 --> 00:13:17.582 Please stay tuned to learn more

NOTE Confidence: 0.84481424

00:13:17.582 --> 00:13:20.040 about surgical management of thoracic

NOTE Confidence: 0.84481424

00:13:20.040 --> 00:13:22.630 malignancies.

NOTE Confidence: 0.84481424

00:13:22.630 --> 00:13:25.702 Support for Yale Cancer Answers comes from AstraZeneca, working

NOTE Confidence: 0.84481424

00:13:25.702 --> 00:13:28.902 to eliminate cancer as a cause of death.

NOTE Confidence: 0.84481424

00:13:28.910 --> 00:13:32.070 Learn more at astrazeneca-us.com.

NOTE Confidence: 0.84481424

00:13:32.070 --> 00:13:35.358 This is a medical minute about breast cancer,

NOTE Confidence: 0.84481424

00:13:35.360 --> 00:13:37.415 the most common cancer in

NOTE Confidence: 0.84481424

00:13:37.415 --> 00:13:39.059 women. In Connecticut alone,

NOTE Confidence: 0.84481424

00:13:39.060 --> 00:13:41.130 approximately 3000 women will be

NOTE Confidence: 0.84481424

00:13:41.130 --> 00:13:43.580 diagnosed with breast cancer this year,

NOTE Confidence: 0.84481424

00:13:43.580 --> 00:13:45.630 but thanks to earlier detection,

NOTE Confidence: 0.84481424

00:13:45.630 --> 00:13:46.454 noninvasive treatments,

NOTE Confidence: 0.84481424

00:13:46.454 --> 00:13:47.690 and novel therapies,

NOTE Confidence: 0.84481424

00:13:47.690 --> 00:13:50.539 there are more options for patients to

NOTE Confidence: 0.84481424

00:13:50.539 --> 00:13:53.030 fight breast cancer than ever before.

NOTE Confidence: 0.84481424

00:13:53.030 --> 00:13:55.085 Women should schedule a baseline

NOTE Confidence: 0.84481424

00:13:55.085 --> 00:13:57.603 mammogram beginning at age 40 or

NOTE Confidence: 0.84481424

00:13:57.603 --> 00:13:59.949 earlier if they have risk factors

NOTE Confidence: 0.84481424

00:13:59.949 --> 00:14:01.660 associated with breast cancer.

NOTE Confidence: 0.84481424

00:14:01.660 --> 00:14:03.595 Digital breast tomosynthesis or

NOTE Confidence: 0.84481424

00:14:03.595 --> 00:14:05.143 3D mammography is transforming

NOTE Confidence: 0.84481424

00:14:05.143 --> 00:14:07.078 breast screening by significantly

NOTE Confidence: 0.84481424

00:14:07.080 --> 00:14:09.288 reducing unnecessary procedures while

NOTE Confidence: 0.84481424

00:14:09.288 --> 00:14:12.600 picking up more cancers and eliminating

NOTE Confidence: 0.84481424

00:14:12.679 --> 00:14:14.755 some of the fear and anxiety

NOTE Confidence: 0.84481424

00:14:14.760 --> 00:14:16.200 many women experience.

NOTE Confidence: 0.84481424

00:14:16.200 --> 00:14:18.120 More information is available

NOTE Confidence: 0.84481424

00:14:18.120 --> 00:14:19.080 at yalecancercenter.org.

NOTE Confidence: 0.84481424

00:14:19.080 --> 00:14:22.830 You're listening to Connecticut Public Radio.

NOTE Confidence: 0.84481424

00:14:22.830 --> 00:14:23.290 Welcome

NOTE Confidence: 0.8562559

00:14:23.290 --> 00:14:25.600 back to Yale Cancer Answers.

NOTE Confidence: 0.8562559

00:14:25.600 --> 00:14:27.910 We are discussing the surgical

NOTE Confidence: 0.8562559

00:14:27.910 --> 00:14:29.758 management of thoracic malignancies,

NOTE Confidence: 0.8562559

00:14:29.760 --> 00:14:32.136 so Andrew right before the break

NOTE Confidence: 0.8562559

00:14:32.136 --> 00:14:35.164 we were talking a lot about how

NOTE Confidence: 0.8562559

00:14:35.164 --> 00:14:37.424 historically lung cancer had been

NOTE Confidence: 0.8562559

00:14:37.424 --> 00:14:39.920 taken out with thoracotomies,

NOTE Confidence: 0.8562559

00:14:39.920 --> 00:14:42.758 which are large cuts people needed

NOTE Confidence: 0.8562559

00:14:42.758 --> 00:14:45.822 to stay in hospital several days in

NOTE Confidence: 0.8562559

00:14:45.822 --> 00:14:49.499 a in a step down unit and how really

NOTE Confidence: 0.8562559

00:14:49.499 --> 00:14:52.709 things have evolved towards vats or

NOTE Confidence: 0.8562559

00:14:52.709 --> 00:14:54.910 video assisted thoracic surgery

NOTE Confidence: 0.8562559

00:14:54.910 --> 00:14:59.430 where you can use kind of small incisions,

NOTE Confidence: 0.8562559

00:14:59.430 --> 00:15:03.510 a little camera that can go in and

NOTE Confidence: 0.8562559

00:15:03.510 --> 00:15:06.111 remove these, ultimately reducing pain,

NOTE Confidence: 0.8562559

00:15:06.111 --> 00:15:09.273 reducing length of stay and you had

NOTE Confidence: 0.8562559

00:15:09.273 --> 00:15:11.803 mentioned before the break that

NOTE Confidence: 0.8562559

00:15:11.803 --> 00:15:13.723 there's yet another technology

NOTE Confidence: 0.8562559

00:15:13.723 --> 00:15:16.258 in terms of robotic surgery.

NOTE Confidence: 0.8562559

00:15:16.260 --> 00:15:17.280 Tell us more about that?

NOTE Confidence: 0.87937516

00:15:17.280 --> 00:15:22.579 The Intuitive company

NOTE Confidence: 0.87937516

00:15:22.580 --> 00:15:26.507 produced a robotic technology in the 2000s,

NOTE Confidence: 0.87937516

00:15:26.510 --> 00:15:29.240 and that's what is commonly

NOTE Confidence: 0.87937516

00:15:29.240 --> 00:15:32.680 known today as the Davinci robot,

NOTE Confidence: 0.87937516

00:15:32.680 --> 00:15:36.190 so that is another minimally invasive

NOTE Confidence: 0.87937516

00:15:36.190 --> 00:15:39.648 tool that thoracic surgeons can use

NOTE Confidence: 0.87937516

00:15:39.648 --> 00:15:42.218 to surgically treat lung cancer.

NOTE Confidence: 0.8922759

00:15:43.550 --> 00:15:46.702 Tell us more about

NOTE Confidence: 0.8922759

00:15:46.702 --> 00:15:49.502 this because the whole concept of

NOTE Confidence: 0.8922759

00:15:49.502 --> 00:15:52.388 you know robots doing your surgery

NOTE Confidence: 0.8922759

00:15:52.481 --> 00:15:56.030 for some might seem really high tech

NOTE Confidence: 0.8922759

00:15:56.030 --> 00:15:58.610 and really innovative and for others,

NOTE Confidence: 0.8922759

00:15:58.610 --> 00:16:01.760 might seem really kind of frightening

NOTE Confidence: 0.8922759

00:16:01.760 --> 00:16:04.918 because you kind of like the idea

NOTE Confidence: 0.8922759

00:16:04.918 --> 00:16:07.475 of a human actually being there

NOTE Confidence: 0.8922759

00:16:07.475 --> 00:16:09.695 to manage your cancer.

NOTE Confidence: 0.8922759

00:16:09.700 --> 00:16:13.210 So how exactly does this robot

NOTE Confidence: 0.8922759

00:16:13.210 --> 00:16:15.214 or robotic surgery work?

NOTE Confidence: 0.8922759

00:16:15.214 --> 00:16:17.719 Is it really like there's

NOTE Confidence: 0.8922759

00:16:17.719 --> 00:16:20.060 a small little robot

NOTE Confidence: 0.8524222

00:16:20.060 --> 00:16:24.132 that goes in there and does your surgery

NOTE Confidence: 0.8524222

00:16:24.132 --> 00:16:26.909 during robotic lung cancer cases?

NOTE Confidence: 0.8524222

00:16:26.910 --> 00:16:30.473 We have the robot arms at the

NOTE Confidence: 0.8524222

00:16:30.473 --> 00:16:34.017 patients table and a few feet away

NOTE Confidence: 0.8524222

00:16:34.017 --> 00:16:36.879 the surgeon sits at a console

NOTE Confidence: 0.8524222

00:16:36.990 --> 00:16:40.428 where they view the images from

NOTE Confidence: 0.8524222

00:16:40.428 --> 00:16:43.822 the robotic camera and they use

NOTE Confidence: 0.8524222

00:16:43.822 --> 00:16:46.577 an instrumentation to remove the

NOTE Confidence: 0.8524222

00:16:46.577 --> 00:16:50.084 robotic arms that way so the surgeon

NOTE Confidence: 0.8524222

00:16:50.084 --> 00:16:53.293 is certainly in the room next to

NOTE Confidence: 0.8524222

00:16:53.293 --> 00:16:56.101 the patient with the robotic arms

NOTE Confidence: 0.8524222

00:16:56.101 --> 00:16:59.450 at the patient doing the

NOTE Confidence: 0.8524222

00:16:59.450 --> 00:17:02.370 actual work inside the chest. So

NOTE Confidence: 0.8519989

00:17:02.370 --> 00:17:05.534 the important key is that the surgeon

NOTE Confidence: 0.8519989

00:17:05.534 --> 00:17:08.521 is really the brain operating

NOTE Confidence: 0.8519989

00:17:08.521 --> 00:17:11.593 the robot and the robot's arms.

NOTE Confidence: 0.8519989

00:17:11.600 --> 00:17:14.056 These robots are not

NOTE Confidence: 0.8519989

00:17:14.056 --> 00:17:15.898 operating independently of

NOTE Confidence: 0.8519989

00:17:15.898 --> 00:17:19.300 a surgeon who is there, is

NOTE Confidence: 0.8668007

00:17:19.300 --> 00:17:21.013 that right?

NOTE Confidence: 0.8668007

00:17:21.013 --> 00:17:23.868 Absolutely, the robot is not autonomous.

NOTE Confidence: 0.8668007

00:17:23.870 --> 00:17:27.874 The robot in each and every movement is

NOTE Confidence: 0.8668007

00:17:27.880 --> 00:17:30.168 directed by the surgeon.

NOTE Confidence: 0.8668007

00:17:30.168 --> 00:17:33.600 So why is this any different

NOTE Confidence: 0.8668007

00:17:33.600 --> 00:17:36.672 then where

NOTE Confidence: 0.8668007

00:17:36.672 --> 00:17:39.890 you're still working with instruments.

NOTE Confidence: 0.8668007

00:17:39.890 --> 00:17:42.750 Looking at an image on

NOTE Confidence: 0.8668007

00:17:42.750 --> 00:17:45.725 a screen, both are certainly

NOTE Confidence: 0.8668007

00:17:45.725 --> 00:17:46.915 minimally invasive

NOTE Confidence: 0.8668007

00:17:46.920 --> 00:17:52.330 approaches with the robotic technology.

NOTE Confidence: 0.8668007

00:17:52.330 --> 00:17:55.280 Formed through four small incisions,

NOTE Confidence: 0.8668007

00:17:55.280 --> 00:18:00.014 each are between 8 to 12 millimeters in size

NOTE Confidence: 0.8668007

00:18:00.014 --> 00:18:04.715 and there there is an additional incision.

NOTE Confidence: 0.8668007

00:18:04.720 --> 00:18:08.062 A small incision that's made for

NOTE Confidence: 0.8668007

00:18:08.062 --> 00:18:11.632 the assistant at the bedside to

NOTE Confidence: 0.8668007

00:18:11.632 --> 00:18:15.334 assist during the operation as well.

NOTE Confidence: 0.8668007

00:18:15.340 --> 00:18:19.340 So both certainly do result in less pain

NOTE Confidence: 0.8668007

00:18:19.340 --> 00:18:23.650 in the postoperative period then and

NOTE Confidence: 0.8668007

00:18:23.650 --> 00:18:24.814 open thoracotomy,

NOTE Confidence: 0.8668007

00:18:24.814 --> 00:18:27.724 the main advantages for the

NOTE Confidence: 0.8668007

00:18:27.724 --> 00:18:30.370 robotic approach is number 1,

NOTE Confidence: 0.8668007

00:18:30.370 --> 00:18:33.370 the improved visualization because of

NOTE Confidence: 0.8668007

00:18:33.370 --> 00:18:37.017 the robotic camera and the technology

NOTE Confidence: 0.8668007

00:18:37.017 --> 00:18:39.737 that went into developing that

NOTE Confidence: 0.8668007

00:18:39.737 --> 00:18:43.525 it does give you a 3 dimensional

NOTE Confidence: 0.8668007

00:18:43.525 --> 00:18:46.045 view of the surgical field.

NOTE Confidence: 0.8668007

00:18:46.050 --> 00:18:49.380 Sort of like you were actually

NOTE Confidence: 0.8668007

00:18:49.380 --> 00:18:52.315 inside the chest looking at

NOTE Confidence: 0.8668007

00:18:52.315 --> 00:18:54.739 these structures and doing

NOTE Confidence: 0.8668007

00:18:54.740 --> 00:18:56.528 the surgery that way.

NOTE Confidence: 0.8668007

00:18:56.528 --> 00:18:58.316 In addition to that,

NOTE Confidence: 0.8668007

00:18:58.320 --> 00:19:00.996 it's certainly more ergonomic as well,

NOTE Confidence: 0.8668007

00:19:01.000 --> 00:19:04.129 and if it's easier on the surgeon,

NOTE Confidence: 0.8668007

00:19:04.130 --> 00:19:06.250 that certainly helps the operation

NOTE Confidence: 0.8668007

00:19:06.250 --> 00:19:09.393 go well and for the patients that

NOTE Confidence: 0.8668007

00:19:09.393 --> 00:19:11.277 have a better outcome.

NOTE Confidence: 0.84329087

00:19:12.860 --> 00:19:17.004 So you know I can appreciate that

NOTE Confidence: 0.84329087

00:19:17.004 --> 00:19:20.628 the camera is a little bit better.

NOTE Confidence: 0.84329087

00:19:20.630 --> 00:19:23.724 The arms are a little bit better

NOTE Confidence: 0.84329087

00:19:23.724 --> 00:19:27.358 in terms of their ergonomics and

NOTE Confidence: 0.84329087

00:19:27.360 --> 00:19:30.755 potentially the degree to which they are

NOTE Confidence: 0.84329087

00:19:30.755 --> 00:19:34.098 flexible in moving in various directions,

NOTE Confidence: 0.84329087

00:19:34.100 --> 00:19:36.690 which can make the operation

NOTE Confidence: 0.84329087

00:19:36.690 --> 00:19:39.280 easier to perform.

NOTE Confidence: 0.84329087

00:19:39.280 --> 00:19:42.442 But there must be added cost

NOTE Confidence: 0.84329087

00:19:42.442 --> 00:19:44.550 to this whole system

NOTE Confidence: 0.84329087

00:19:44.550 --> 00:19:48.138 over VATS which as you mentioned,

NOTE Confidence: 0.84329087

00:19:48.140 --> 00:19:50.532 is pretty universally available.

NOTE Confidence: 0.84329087

00:19:50.532 --> 00:19:51.130 Certainly

NOTE Confidence: 0.84984183

00:19:51.130 --> 00:19:55.253 the robotic system has a greater capital

NOTE Confidence: 0.84984183

00:19:55.253 --> 00:20:00.520 costs for the hospital for the health system.

NOTE Confidence: 0.84984183

00:20:00.520 --> 00:20:03.978 And in addition to the actual tools,

NOTE Confidence: 0.84984183

00:20:03.980 --> 00:20:07.438 the actual robot and the consoles there

NOTE Confidence: 0.84984183

00:20:07.438 --> 00:20:10.447 does need additional training

NOTE Confidence: 0.84984183

00:20:10.447 --> 00:20:14.350 on the side of the staff as well.

NOTE Confidence: 0.84984183

00:20:14.350 --> 00:20:17.717 For example, a person at the bedside

NOTE Confidence: 0.84984183

00:20:17.717 --> 00:20:20.224 being another surgeon or resident

NOTE Confidence: 0.84984183

00:20:20.224 --> 00:20:22.180 physician assistant to assist

NOTE Confidence: 0.84984183

00:20:22.180 --> 00:20:25.220 and in addition to that person

NOTE Confidence: 0.84984183

00:20:25.220 --> 00:20:27.820 of course, the nursing staff

NOTE Confidence: 0.84984183

00:20:27.820 --> 00:20:31.719 in the room to help set up the

NOTE Confidence: 0.84984183

00:20:31.720 --> 00:20:34.550 robotic instrumentation for the

NOTE Confidence: 0.84984183

00:20:34.550 --> 00:20:38.371 operation and not to mention in scenarios

NOTE Confidence: 0.84984183

00:20:38.371 --> 00:20:42.510 where an acute issue needs to be dealt with,

NOTE Confidence: 0.84984183

00:20:42.510 --> 00:20:45.958 the whole team needs to be aware of

NOTE Confidence: 0.84984183

00:20:45.958 --> 00:20:49.806 how to maneuver things so that they

NOTE Confidence: 0.84984183

00:20:49.806 --> 00:20:53.820 could be dealt with without the robot,

NOTE Confidence: 0.84984183

00:20:53.820 --> 00:20:58.888 and so there are

NOTE Confidence: 0.84984183

00:20:58.890 --> 00:21:03.946 many things that are required for

NOTE Confidence: 0.84984183

00:21:03.946 --> 00:21:08.545 a surgeon to perform robotic thoracic

NOTE Confidence: 0.84984183

00:21:08.545 --> 00:21:13.345 surgery as part of their practice.

NOTE Confidence: 0.84984183

00:21:13.350 --> 00:21:19.070 One of the ideas behind the

NOTE Confidence: 0.84984183

00:21:19.070 --> 00:21:23.743 technology is also to allow surgeons

NOTE Confidence: 0.84984183

00:21:23.743 --> 00:21:29.240 who have perhaps not trained in vats

NOTE Confidence: 0.84984183

00:21:29.240 --> 00:21:33.034 to be able to perform a minimally

NOTE Confidence: 0.84984183

00:21:33.034 --> 00:21:35.889 invasive approach a lot easier.

NOTE Confidence: 0.82035017

00:21:37.930 --> 00:21:41.325 As both the vats approach and the

NOTE Confidence: 0.82035017

00:21:41.325 --> 00:21:44.125 robotic approach do have learning

NOTE Confidence: 0.82035017

00:21:44.125 --> 00:21:46.625 curves associated with them,

NOTE Confidence: 0.82035017

00:21:46.630 --> 00:21:49.780 the learning curve from open thoracotomy

NOTE Confidence: 0.82035017

00:21:49.780 --> 00:21:53.081 to robotic approach is an easier

NOTE Confidence: 0.82035017

00:21:53.081 --> 00:21:55.876 minimally invasive approach to learn.

NOTE Confidence: 0.8788953

00:21:57.460 --> 00:22:00.298 And so from the patient's standpoint,

NOTE Confidence: 0.8788953

00:22:00.300 --> 00:22:03.618 if you compare vats to robotic surgery,

NOTE Confidence: 0.8788953

00:22:03.620 --> 00:22:06.994 is there any difference in terms of

NOTE Confidence: 0.8788953

00:22:06.994 --> 00:22:11.210 length of stay or pain, or return to work?

NOTE Confidence: 0.8780179

00:22:13.130 --> 00:22:15.845 There have been and continue

NOTE Confidence: 0.8780179

00:22:15.845 --> 00:22:19.180 to be studies looking at this.

NOTE Confidence: 0.8780179

00:22:19.180 --> 00:22:22.060 And other factors as well.

NOTE Confidence: 0.8780179

00:22:22.060 --> 00:22:26.180 For example, the length of state there is

NOTE Confidence: 0.8780179

00:22:26.180 --> 00:22:30.676 a trend towards decrease length of stay.

NOTE Confidence: 0.8780179

00:22:30.680 --> 00:22:34.705 There is a trend towards decrease pain,

NOTE Confidence: 0.8780179

00:22:34.710 --> 00:22:39.240 but so far nothing that is

NOTE Confidence: 0.8780179

00:22:39.240 --> 00:22:40.750 statistically significant.

NOTE Confidence: 0.8780179

00:22:40.750 --> 00:22:43.515 The other factor to consider

NOTE Confidence: 0.8780179

00:22:43.515 --> 00:22:46.280 is from a cancer operation.

NOTE Confidence: 0.8780179

00:22:46.280 --> 00:22:49.634 If any of these minimally invasive

NOTE Confidence: 0.8780179

00:22:49.634 --> 00:22:52.589 approaches are similar or different

NOTE Confidence: 0.8780179

00:22:52.589 --> 00:22:55.709 than the traditional approach in

NOTE Confidence: 0.8780179

00:22:55.709 --> 00:22:59.671 terms of cancer survival and so far

NOTE Confidence: 0.8780179

00:22:59.671 --> 00:23:02.407 both events in the robotic approach

NOTE Confidence: 0.8780179

00:23:02.407 --> 00:23:06.242 do not have a difference between them

NOTE Confidence: 0.8780179

00:23:06.242 --> 00:23:09.882 or with the traditional

NOTE Confidence: 0.8780179

00:23:09.882 --> 00:23:13.740 approach in terms of cancer survivorship.

NOTE Confidence: 0.820907300000001

00:23:14.160 --> 00:23:17.352 And is robotic surgery covered by all

NOTE Confidence: 0.820907300000001

00:23:17.352 --> 00:23:20.528 insurance the way vats is and would

NOTE Confidence: 0.820907300000001

00:23:20.528 --> 00:23:23.627 be the cost to the patient and or

NOTE Confidence: 0.820907300000001

00:23:23.627 --> 00:23:26.637 to the hospital system be the same.

NOTE Confidence: 0.8554135

00:23:27.840 --> 00:23:30.355 Most insurance companies do recognize

NOTE Confidence: 0.8554135

00:23:30.355 --> 00:23:33.590 robotic surgery and it is covered.

NOTE Confidence: 0.8554135

00:23:33.590 --> 00:23:37.468 I don't know the specifics of how

NOTE Confidence: 0.8554135

00:23:37.468 --> 00:23:40.288 the comparison between a robotic

NOTE Confidence: 0.8554135

00:23:40.288 --> 00:23:42.913 approach versus a vats approach

NOTE Confidence: 0.8554135

00:23:42.913 --> 00:23:46.669 in terms of the final cost to the

NOTE Confidence: 0.8554135

00:23:46.670 --> 00:23:49.785 patient.

NOTE Confidence: 0.8554135

00:23:49.785 --> 00:23:52.267 So how do you make the decision between whether

NOTE Confidence: 0.8554135

00:23:52.267 --> 00:23:55.417 to offer patients a VATS procedure

NOTE Confidence: 0.8554135

00:23:55.417 --> 00:23:58.169 versus a robotic procedure?

NOTE Confidence: 0.88799626

00:23:58.930 --> 00:24:04.339 I think the main thing is from the surgeon

NOTE Confidence: 0.88799626

00:24:04.339 --> 00:24:07.778 experience and training standpoint.

NOTE Confidence: 0.88799626

00:24:07.780 --> 00:24:13.204 I think when patients are seeing a thoracic

NOTE Confidence: 0.88799626

00:24:13.204 --> 00:24:18.140 surgeon and discussing surgical options

NOTE Confidence: 0.88799626

00:24:18.140 --> 00:24:21.346 mostly, a surgeon has trained and is

NOTE Confidence: 0.88799626

00:24:21.346 --> 00:24:24.513 comfortable with the vats approach and then

NOTE Confidence: 0.88799626

00:24:24.513 --> 00:24:27.720 I think that is appropriate of course.

NOTE Confidence: 0.88799626

00:24:27.720 --> 00:24:30.420 And if they are more comfortable

NOTE Confidence: 0.88799626

00:24:30.420 --> 00:24:33.214 and have trained in the robotic

NOTE Confidence: 0.88799626

00:24:33.214 --> 00:24:36.378 approach then that is fine as well.

NOTE Confidence: 0.88799626

00:24:36.380 --> 00:24:39.019 I think the main thing for

NOTE Confidence: 0.88799626

00:24:39.019 --> 00:24:42.610 patients to be aware of is that the

NOTE Confidence: 0.88799626

00:24:42.610 --> 00:24:44.985 thoracic surgeon have some experience

NOTE Confidence: 0.88799626

00:24:45.074 --> 00:24:47.779 in a minimally invasive approach,

NOTE Confidence: 0.88799626

00:24:47.780 --> 00:24:50.170 whether it's vats or robotic.

NOTE Confidence: 0.88799626

00:24:50.170 --> 00:24:54.506 So that their length of stay is less,

NOTE Confidence: 0.88799626

00:24:54.510 --> 00:24:56.682 their pain is less.

NOTE Confidence: 0.88799626

00:24:56.682 --> 00:24:59.940 Their return to work is sooner,

NOTE Confidence: 0.88799626

00:24:59.940 --> 00:25:03.156 and there are also less complications

NOTE Confidence: 0.88799626

00:25:03.156 --> 00:25:05.932 after surgery compared to the

NOTE Confidence: 0.88799626

00:25:05.932 --> 00:25:08.627 traditional open approach as well.

00:25:10.570 --> 00:25:13.006 Do all hospitals have robotic

NOTE Confidence: 0.8563883

00:25:13.006 --> 00:25:15.863 surgery or when we

NOTE Confidence: 0.8563883

00:25:15.863 --> 00:25:19.100 were talking about VATS you had kind of

NOTE Confidence: 0.8563883

00:25:19.100 --> 00:25:21.938 mentioned that this is pretty ubiquitous.

NOTE Confidence: 0.8563883

00:25:21.940 --> 00:25:24.892 Most people have trained in vats and

NOTE Confidence: 0.8563883

00:25:24.892 --> 00:25:28.468 so it would be something that would be

NOTE Confidence: 0.8563883

00:25:28.468 --> 00:25:31.619 very amenable no matter where you were.

NOTE Confidence: 0.8563883

00:25:31.620 --> 00:25:34.038 It doesn't sound like that's necessarily

NOTE Confidence: 0.8563883

00:25:34.038 --> 00:25:36.250 the case for robotic surgery.

00:25:36.670 --> 00:25:39.256 Is that right?

NOTE Confidence: 0.8563883

00:25:39.256 --> 00:25:41.650 Not all hospital systems have the Davinci

NOTE Confidence: 0.8563883

00:25:41.650 --> 00:25:44.655 technology this is something

NOTE Confidence: 0.8563883

00:25:44.655 --> 00:25:48.325 that is becoming more common and

NOTE Confidence: 0.8563883

00:25:48.325 --> 00:25:51.140 my understanding from a financial

NOTE Confidence: 0.8563883

00:25:51.140 --> 00:25:54.026 standpoint is that the company

NOTE Confidence: 0.8563883

00:25:54.026 --> 00:25:57.764 does work with the hospital in the

NOTE Confidence: 0.8563883

00:25:57.764 --> 00:26:01.370 health system to come up with a

NOTE Confidence: 0.8563883

00:26:01.370 --> 00:26:05.331 suitable plan so that they can offer

NOTE Confidence: 0.8563883

00:26:05.331 --> 00:26:08.611 the robotic technology to their

NOTE Confidence: 0.8563883

00:26:08.611 --> 00:26:12.650 patients and to save on the cost.

NOTE Confidence: 0.8563883

00:26:12.650 --> 00:26:16.154 And that cost savings,

NOTE Confidence: 0.8563883

00:26:16.160 --> 00:26:17.912 hopefully does get passed

NOTE Confidence: 0.8563883

00:26:17.912 --> 00:26:20.102 on to the patient as

NOTE Confidence: 0.849295560000001

00:26:20.110 --> 00:26:23.166 well, and you had

NOTE Confidence: 0.849295560000001

00:26:23.166 --> 00:26:25.960 talked about kind of deciding between

NOTE Confidence: 0.849295560000001

00:26:25.960 --> 00:26:28.882 vats versus robotic surgery you

NOTE Confidence: 0.849295560000001

00:26:28.971 --> 00:26:31.981 really mentioned that it had to do

NOTE Confidence: 0.849295560000001

00:26:31.981 --> 00:26:34.230 primarily with the surgeons comfort.

NOTE Confidence: 0.849295560000001

00:26:34.230 --> 00:26:37.080 If surgeons are comfortable with both

NOTE Confidence: 0.849295560000001

00:26:37.080 --> 00:26:39.869 techniques and have been trained in both,

NOTE Confidence: 0.849295560000001

00:26:39.870 --> 00:26:41.774 are there particular patient

NOTE Confidence: 0.849295560000001

00:26:41.774 --> 00:26:43.678 characteristics that would lean

NOTE Confidence: 0.849295560000001

00:26:43.678 --> 00:26:46.007 you more one way or another?

NOTE Confidence: 0.8922881

00:26:46.900 --> 00:26:51.870 Yeah, for the robotic approach

NOTE Confidence: 0.8922881

00:26:51.870 --> 00:26:55.266 the instruments tend to be longer

NOTE Confidence: 0.8922881

00:26:55.266 --> 00:26:58.150 and sturdier than the vats

NOTE Confidence: 0.8922881

00:26:58.150 --> 00:27:01.010 instruments and so for patients

NOTE Confidence: 0.8922881

00:27:01.010 --> 00:27:04.322 for example, who might be morbidly

NOTE Confidence: 0.8922881

00:27:04.322 --> 00:27:07.859 obese

NOTE Confidence: 0.8922881

00:27:07.860 --> 00:27:12.765 it would be easier for the surgeon to do

NOTE Confidence: 0.8922881

00:27:12.765 --> 00:27:17.769 the surgery robotically versus by vats.

NOTE Confidence: 0.8922881

00:27:17.770 --> 00:27:21.225 And there are other scenarios

NOTE Confidence: 0.8922881

00:27:21.225 --> 00:27:25.430 from a tumor standpoint as well.

NOTE Confidence: 0.8922881

00:27:25.430 --> 00:27:27.934 With the robotic approach,

NOTE Confidence: 0.8922881

00:27:27.934 --> 00:27:31.690 the ability to do very fine

NOTE Confidence: 0.8922881

00:27:31.808 --> 00:27:34.776 detailed dissection and surgery

NOTE Confidence: 0.8922881

00:27:34.776 --> 00:27:39.228 is enhanced compared to the vats

NOTE Confidence: 0.8922881

00:27:39.345 --> 00:27:43.515 approach due to the improved camera,

NOTE Confidence: 0.8922881

00:27:43.520 --> 00:27:47.786 improved ergonomics and the ability

NOTE Confidence: 0.8922881

00:27:47.790 --> 00:27:50.225 for the robotic instrumentation to

NOTE Confidence: 0.8922881

00:27:50.225 --> 00:27:52.660 have greater degrees of freedom

NOTE Confidence: 0.8922881

00:27:52.735 --> 00:27:54.580 with the instrumentation,

NOTE Confidence: 0.8922881

00:27:54.580 --> 00:27:58.748 so for those types of tumors as well,

NOTE Confidence: 0.8922881

00:27:58.750 --> 00:28:01.170 those are

NOTE Confidence: 0.8922881

00:28:01.170 --> 00:28:05.226 better performed with robotic versus vats.

NOTE Confidence: 0.8610148

00:28:05.870 --> 00:28:08.120 Doctor Andrew Dhanasopon is an

NOTE Confidence: 0.8610148

00:28:08.120 --> 00:28:09.620 assistant professor of thoracic

NOTE Confidence: 0.8610148

00:28:09.681 --> 00:28:12.040 surgery at the Yale School of Medicine.

NOTE Confidence: 0.8610148

00:28:12.040 --> 00:28:13.496 If you have questions,

NOTE Confidence: 0.8610148

00:28:13.496 --> 00:28:14.952 the address is canceranswers@yale.edu

NOTE Confidence: 0.8610148

00:28:14.952 --> 00:28:16.963 and past editions of the program

NOTE Confidence: 0.8610148

00:28:16.963 --> 00:28:18.799 are available in audio and written

NOTE Confidence: 0.8610148

00:28:18.857 --> 00:28:20.390 form at yalecancercenter.org.

NOTE Confidence: 0.8610148

00:28:20.390 --> 00:28:22.790 We hope you'll join us next week to

NOTE Confidence: 0.8610148

00:28:22.790 --> 00:28:25.136 learn more about the fight against

NOTE Confidence: 0.8610148

00:28:25.136 --> 00:28:27.644 cancer here on Connecticut Public Radio.